

## GTE sues Douglas County PUD over fiber optic network

(continued from page 1)

public power utility.

The PUD, headquartered in East Wenatchee, Wash., has built a fiber optic network to use for remote meter reading and other electric utility applications. The utility leases excess capacity on the system to a bank, a local school district, a telecommunications company and to county offices, utility Manager Bill Dobbins told *Public Power Weekly*.

The PUD plans to expand the network from the current 30 miles of fiber optic cable, which links the utility's substations, to 102.5 miles, Dobbins said. That will enable the utility's fiber optic network to connect with a hydro power plant the PUD operates on the Columbia River, he said.

GTE says a 1998 ruling by the state attorney general bars PUDs from building fiber optics networks beyond what they need to provide electric service to their customers. The ruling says PUDs can lease excess capacity on their fiber optic networks, but prohibits them from building extra facilities for the purpose of leasing them out, GTE said.

"We feel Douglas PUD is building significantly more capacity than they need," said Marilyn Hoggarth, GTE's public affairs manager for Washington. "They're out soliciting customers to use that extra capacity because the system more than services their needs."

GTE said it is "concerned by government entities, such as public utility districts, entering the telecommunications business with an unfair advantage because of cost subsidies, tax exemptions and other issues. We don't believe PUDs should use taxpayer or ratepayer dollars to construct telecommunications facilities and provide telecommunications services."

But Dobbins said the utility has built the 48-fiber system with its own needs in mind. "The purpose of putting this system in is to support our electrical functions," he said.

The amount of fiber optic capacity a utility is likely to need in the future "is a judgment call," he told *Public Power Weekly*. Some utilities, such as the one operated by the city of Anaheim, Calif., have installed fiber optic cable with 144 fibers—far more than the PUD's 48-fiber system, he noted.

Dobbins added that the Douglas County PUD serves about 15,500 meters in an area twice the size of Rhode Island. Much of Washington state is rural and lacks access to high-speed communications, he said. Public utility districts in the state want to be able to offer telephone and other telecommunications services if they are needed in their communities, he said.

A bill before the state Legislature, Senate Bill 6105, would authorize this, in communities where residents voted in favor of a PUD-run telecom system.

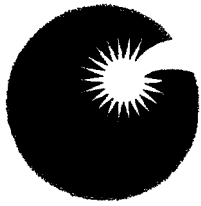
### Telephone companies sue Pacific County PUD

The Washington Independent Telephone Association filed suit in Pacific County Superior Court Dec. 6 against Public Utility District No. 2 of Pacific County. The telephone companies want to stop the PUD from offering

Internet service, said Terry Vann, executive vice president of WITA.

"Public utility districts are untaxed and unregulated and they should not be allowed to use their tax subsidies to unfairly compete with tax-paying private telephone companies," said Vann.

The same day WITA filed suit against the Pacific County PUD, the telephone association proposed legislation designed to keep PUDs out of the telecommunications business. The proposed bill would clarify that private, independent telephone companies—not PUDs—are the preferred providers for advanced telecom services in rural areas. ■



## ***ashland fiber network***

### **Ashland Fiber Network Facts**

Ashland Fiber Network (AFN), a fiber optic ring that weaves through the city's neighborhoods, is unlike any other system in the country. It's so revolutionary, software companies are scrambling to create state-of-the-art products to make use of our network's capabilities. The AFN network will provide us with incredible speed, unquestioned reliability and competitive pricing for years to come.

AFN offers three innovative products:

#### **1. AFN DATA**

AFN's high speed data service is currently available to businesses and institutions that require a large amount of bandwidth. AFN Data offers high speed data connections at either 10 Mbps or 100 Mbps utilizing a direct fiber link. Customers are connected to the AFN Data network via an Ethernet drop to your business. Our service does not require a router or other expensive data translation device, as would a T-1 or SONET connection.

#### **2. AFN INTERNET**

Arriving to the first neighborhoods summer 1999, AFN Internet provides high speed connections to the internet — with connection speeds of 3-5 Mbps through a cable modem. This service is available to both residential and businesses customers, who don't need the larger bandwidths available with AFN Data. There is no phone line required with AFN Internet. With AFN Internet, customers are able to download a 3.5MB file in about 1 second, compared with a 56.6K modem that would take nearly 8 minutes. (With a clear connection and computer that can accept data that fast.)

#### **3. AFN TELEVISION**

With AFN Television, Ashland residents have a choice in television service. Scheduled to arrive simultaneously with AFN Internet, it offers an extensive channel line-up at competitive prices. A committee made-up of local residents determined AFN Television's channel options and services.

#### **Timeline**

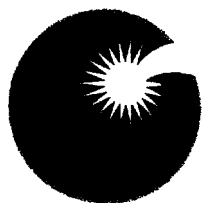
AFN Data is currently available to businesses with larger bandwidth requirements.

AFN Internet and AFN Television are scheduled to be offered in the first neighborhoods sometime this summer.

AFN Internet and AFN Television will be turned-on simultaneously in phases — from neighborhood to neighborhood — as the system of fiber rings is built. Our goal is to build out multiple neighborhoods (or nodes) at a time.

*See our web site at [www.Ashlandfiber.net](http://www.Ashlandfiber.net) for more the latest information about AFN.*





***ashland fiber network***

## **Frequently Asked Questions**

### **WHAT IS AFN?**

AFN is a fiber optic ring that weaves through the city's neighborhoods. The fiber originates from the "HeadEnd" - which is the brains of the system. The HeadEnd receives television signals from our satellite feed, and provides the connection for high speed Internet and data. After traveling through the fiber optic ring, this information and technology will be delivered through a fiber or coaxial cable connected directly to customers' homes or businesses. AFN Internet and AFN Data users will be connected to the world wide web through the region's Point-of-Presence (POP) router - which will allow you to surf the web and use the internet to connect to the local or national ISP (Internet Service Provider) of your choice.

### **WHO CAN USE AFN?**

AFN is for everybody in Ashland. And you don't have to be a technology expert to benefit from it. AFN will not only provide high speed internet connections and a real choice in television service — it promises to strengthen our close-knit community even further through added services and the innovative communication it will bring.

### **WHEN CAN I GET IT?**

Ashland Fiber Network will be turned-on in phases — from neighborhood to neighborhood — as the system of fiber rings is built. The first neighborhood is to be activated sometime this summer.

### **HOW CAN I SIGN UP?**

Prior to your neighborhood being "turned on," the City of Ashland will place advertisements as well as send an announcement directly to your home with the details of the service and how you can get hooked up. Or check our website at [www.Ashlandfiber.net](http://www.Ashlandfiber.net) for further updates. Residents can get their names on an "Early Sign Up List" by contacting Ashland Fiber Network or by visiting our website, or call 552-2222.

### **WHAT'S THE BIG DEAL?**

The fiber optic ring and series of neighborhood are unlike any other system in Oregon. It's so revolutionary, software companies are scrambling to create state-of-the-art products to make use of our network's capabilities. AFN is a network that will provide Ashland with incredible speed, unquestioned reliability, competitive pricing and unlimited possibilities. In addition to having access to state-of-the-art technology, the other benefit is that AFN provides our community with real *choice* in internet and television service.

### **WHAT WILL IT DO FOR ASHLAND?**

It will allow us to compete in the global market place! With AFN, Ashland's growing high-tech community will be able to remain competitive with urban areas like Eugene, Portland, Seattle and San Francisco. Plus, the City will be able to attract high tech businesses not otherwise likely to relocate to Ashland, and allow existing businesses to tap new international markets.

**WILL WE GET THE COMEDY CHANNEL?**

Yes! Comedy Central is part of our Tier 3 line-up.

**SHOULD THE PUBLIC SECTOR COMPETE WITH THE PRIVATE SECTOR?**

A precedent has already been set in the electric utility industry. Some communities in Oregon provide electric utilities, and rates in those communities are significantly less than areas served by the private utility sector. Ashland's utility rates are less than surrounding communities where electric services are provided by the private sector. Currently, high-speed data services are offered only in metropolitan areas. This puts us at a competitive disadvantage with these areas. AFN brings high speed data services and a choice for cable TV to Ashland.

**CAN I STILL GET FALCON CABLE?**

Yes. Ashland Fiber Network offers residents of Ashland a choice in television service. You choose the service that best fits your needs and budget.

**CAN I KEEP MY E-MAIL ADDRESS?**

AFN's open network approach will ensure that users of AFN for Internet will be free to use the ISP of their choice and retain their e-mail address as they choose.

**CAN I STILL USE MY CURRENT ISP?**

Ashland Fiber Network is currently establishing partnerships with many local ISPs to offer the best service and prices possible to Ashland residents.

**WHAT EQUIPMENT DO I NEED?**

Users of AFN Internet will need to rent or purchase a cable modem to take advantage of the high speeds offered through our service. Cable modems are the connection point between your computer and the coaxial cable in your home that supplies the AFN service. AFN Internet users will also need an Ethernet card installed in their computer. This is a simple procedure that can be done by a professional or the computer owner, depending on their level of expertise. AFN is currently testing cable modems to determine which is best for our system. For more details, contact an AFN Certified ISP.

**HOW WILL THEY HOOK AFN UP TO MY HOUSE?**

Connecting AFN services to your home is a simple procedure — much like installing traditional cable television. Co-axial cable is connected to the fiber and then brought to your home.

**DO I NEED TO BUY A NEW COMPUTER?**

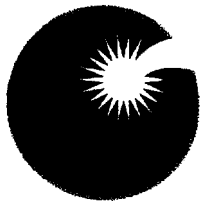
For details, contact an AFN Certified ISP.

**HOW DOES IT COMPARE TO OTHER INTERNET SERVICES?**

AFN Internet offers download speeds of 3-5 Mbps — compared with 56,000 bits per second — for around \$15 a month.

**CAN I COMMUNICATE WITH PEOPLE WHO AREN'T ON THE ASHLAND FIBER NETWORK?**

Certainly. You can e-mail friends and visit chat rooms just as you did before only at much higher speeds.



## ***ashland fiber network***

### **Points to Remember**

#### **Supports State Strategic Plan**

- AFN meets the intent of the State's strategic plan, Oregon Shines II, which recognizes the benefit to the State of having high technology jobs and a technology based economy.
- SB 994 was passed by the State Legislature in 1995 creating the Oregon Telecommunication Forum Council. The Governor appointed members of the Council. Participants in the Council work to ensure affordable access to telecommunications solutions for all Oregon communities and the utilization of telecommunications in the service of economic development, education, health care, government services and civic involvement.
- AFN will provide affordable access to Ashland citizens and businesses.

#### **Supports Rural Economic Development**

- AFN provides a means for existing Ashland businesses to compete in the global economy via high-speed data services.
- The availability of high-speed data services will allow the City to attract new businesses, which in turn, create new employment opportunities. Advanced telecommunications services are traditionally available only in metropolitan areas and are provided by private companies. These companies have not invested these systems in smaller cities or rural areas.

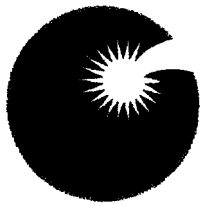
#### **The Need**

- Ashland's current economy is based on tourism and higher education. These industries will always remain critical to Ashland, however, they provide few new employment opportunities and tourism offers primarily lower wage jobs.
- With a telecommunication infrastructure, the City will be able to attract high tech businesses not otherwise likely to relocate to Ashland.
- Without an advanced telecommunication infrastructure, Ashland's growing high-tech community will be unable to remain competitive with urban areas like Eugene, Portland, Seattle and San Francisco, which will have advanced telecommunication facilities.

#### **Should the public sector compete with the private sector?**

- A precedent has already been set in the electric utility industry. Some communities in Oregon provide electric utilities, and rates in those communities are significantly less than areas served by the private utility sector. Ashland's utility rates are less than surrounding communities where electric services are provided by the private sector.
- Other municipalities in the U.S. have successfully entered the telecommunications arena.
- High speed data services are offered only in metropolitan areas. This puts us at a competitive disadvantage with these areas. There was no high-speed data service offered in Ashland.





## ***ashland fiber network***

*Here are some of the services proposed for the Ashland Fiber Network in the near future. You may wish to consider some of these services for your own telecommunications project.*

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### **Ashland Fiber Network Services**

#### **AFN/Internet**

With AFN/Internet, you'll have the world at your fingertips in seconds rather than minutes. Working through your Internet Service Provider, you'll be sending and receiving information at up to an incredible 30 million bits per second. Here are some ways you'll benefit:

- With AFN/Internet, you'll be linked to the world hundreds of times faster than the current speed of 28.8K.
- You can send and receive quality graphics within seconds rather than minutes.
- You'll be connected directly – AFN/Internet has no need for phone lines. That also means no more busy signals.
- High technology business can have direct fiber connection allowing high-speed transfer of large amounts of data along with other advantages.

#### **AFN/Wellness**

Telemedicine will change the way health care providers care for their patients and the way the industry works. It will give practitioners the advantage of collective wisdom while saving hospitals, physicians and the community time, effort and resources. Telemedicine opens the door to shared knowledge and better health.

**Here are a few ways it will benefit all of us:**

- Telemedicine moves information, not people. Patients won't have to travel for second opinions, and doctors won't have to leave their offices to attend medical meetings.
- Health care providers and patients can benefit from two-way audiovisual conferences.
- Sharing patient records and medical images among multiple medical services will help speed up the process of patient care, especially in medical emergencies.

**Here's what else telemedicine will bring:**

- Remote patient monitoring
- Connection to isolated areas
- Post surgical follow-up
- Medication checks
- Management of chronic diseases
- Patient counseling



## **AFN/Discover**

Education will never be the same. With AFN/Discover, access to information and people will take learning in a single classroom out to the worldwide arena. For example, students can visit the Smithsonian online and interact with questions and comments. Here are a few more ways we'll make new discoveries:

Distance learning possibilities may include things like being able to take a class from home when the classroom registration is full or you have problems coordinating childcare.

Two-way audio/visual conferencing will be available to connect the outside world to the classroom.

Students can attend a class anywhere in the world without leaving their hometown.

Professors will teach to classrooms throughout the world.

Student plays, for example, can be performed 'live' for other classrooms using video-conferencing technology.

Citizens can become better educated informally through having access to a broader and more varied window to the world.

## **AFN/Television**

With AFN/Cable, you'll get state-of-the art digital interactive television on certain stations. Interactive means you have some control over what's happening on your screen. Here are a few examples:

With AFN/Cable, some stations allow you to scroll ahead during programs. For instance, if you're watching the evening news just to see tomorrow's forecast, you can skip over sports and go straight to the weather.

You can change camera angles during sporting events. With AFN/Cable, you can change angles on a whim. (How about watching from the 50-yard line?)

You can access the World Wide Web while watching TV. For example, if you subscribe to AFN/Cable and you see an advertiser's icon in the corner of your screen, you can click on that icon and go directly to the advertiser's Web page.

You can subscribe to Video on Demand. You'll get to choose the movie you want to see from a long list, and choose what time you want to see it. You can stop the movie and then return to it when you want.

But that's not all. With AFN/Cable you'll also get:

The clearest, most consistent picture the world has to offer today

More programming available to you than before

A smaller bill. Yes, AFN/Cable will be less expensive than current average rates. We're working hard to give you tomorrow's technology at yesterday's price.

# Outsourcing & Services

## MONITORING

### AppScout adds SLA monitor

NetScout Systems Inc. last week introduced a new version of its AppScout application performance management software and an AppScout Edge software probe.

AppScout 2.0 goes beyond monitoring application performance across an enter-

## DIGEST

prise network to add reporting for application service-level agreements.

The new release ties into Cisco Systems Inc.'s CiscoAssure policy-based network management tools to measure and report on quality of service for critical business applications.

The \$12,500 AppScout 2.0, due in June, runs on Windows NT, Solaris and HP-UX. The AppScout Edge probe, which monitors Ethernet, Fast Ethernet and Token-Ring networks, costs \$2,500 for a 10-user license.

NetScout, of Westford, Mass., is at (888) 999-5946 or [www.netscout.com](http://www.netscout.com).

## TELECOMMUNICATIONS

### Sprint offers conferencing

Sprint Business Services Group is offering an on-demand voice and data conferencing service based on conferencing software from PlaceWare Inc.

The Sprint Internet Conference Cen-

# Fiber comes to Silicon Forest

Ashland invests in high-speed network for telemedicine, distance learning

BY PAULA MUSICH IN ASHLAND, ORE.

## CASE STUDY

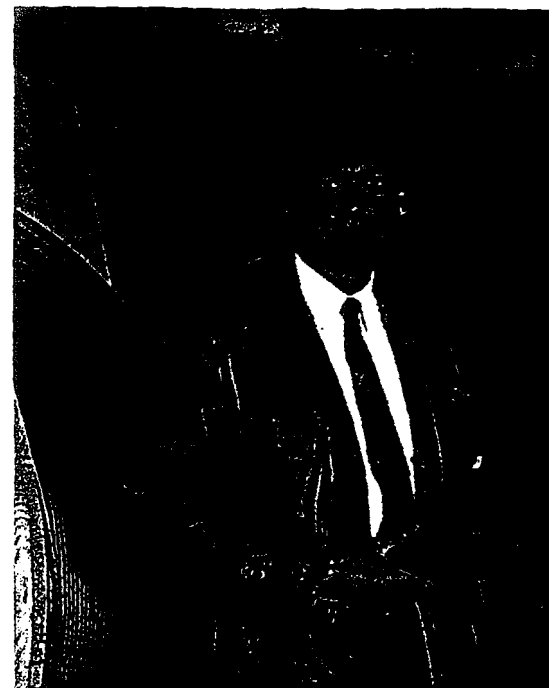
THE TELECOM-  
munications

Act of 1996 spawned dozens of high-speed metropolitan area network projects in small and medium-size cities across the country. But few communities, if any, have set out to offer as broad an array of services as this southern Oregon town.

With a 12-mile high-capacity fiber backbone already installed, this outpost of the "Silicon Rain Forest" has set out to create a networking system that will provide businesses and residents with local high-speed data connections, Internet access and cable TV. Applications envisioned to exploit these services range from telemedicine and distance learning to interactive cable TV and even home security.

Already, three local businesses are using the 100M-bps Ethernet connections linked to the Gigabit Ethernet backbone, which loops through the city. Local schools are set to connect to the backbone at 100M bps in the fall, with testing planned for this summer.

But the city's department of electric utilities, which is responsible for the Ashland



Lovrovich is rolling out a hybrid fiber/coax network across town.

Fiber Network, plans to aggressively build out the network over the next year to provide lower-speed links to customers throughout the city. Its plan is to act as a city-owned competitor to local cable

provider Falcon Cable Systems Inc. by offering its own package of digital programming and acting as a transport provider for ISPs (Internet service providers) to offer cable modem-based Internet access to customers.

Ashland's electric utilities department, which acts as the local power company, initially investigated building the fiber network as a means to support its own operations. But the project's scope quickly expanded as deregulation of the electric industry loomed and the rush to improve the telecommunications infrastructure across the country threatened to leave smaller communities in the dust.

"Existing [telecom] infrastructures aren't adequate," said Peter Lovrovich, Ashland's director of electric utilities. "[Regional Bell Operating Company] US West [Corp.] and others said they would improve [those infrastructures] for the top 100 cities. Ashland was not on that list."

The complete network will use a hybrid fiber/coaxial cable design. Although the department considered creating an end-to-end fiber network that would bring Ether-

CONTINUED ON PAGE 58 ▶

# IBM undertakes e-commerce services

\$320 million for Fibex Systems and \$125 million for Sentient Networks Inc., both makers of voice/data ATM (asynchronous transfer mode) equipment.

Meanwhile, Nortel Networks, of Brampton, Ontario, acquired IP networking start-up Shasta Networks Inc., of Sunnyvale, Calif., for \$340 million and its brand-new Subscriber Service System public IP services provisioning platform. Shasta's Subscriber Service System, introduced last month, lets data carriers and Internet service providers aggregate high-density data traffic generated by a va-

COMPANY	ACQUISITION	PRICE	PRODUCT GAINED
Cisco	GeoTel	\$2 billion	Voice and data call center software for packet and circuit networks
	Sentient Networks	\$125 million	Voice and data ATM hardware
	Fibex Systems	\$320 million	Voice and data ATM hardware
Nortel	Shasta Networks	\$340 million	Provisioning and customer management platform
Ericsson	Torrent	\$450 million	Carrier IP switches
	TouchWave	\$46 million	IP telephony PBXes and software

counterparts Siemens and Alcatel is pushing into the U.S. equipment market, picked Torrent to help establish itself in the IP routing market and give it a head start in the growing market for converged terrestrial and wireless integrated voice and data services and equipment, Ericsson officials said.

Cisco Systems can be reached at (800) 553-6387 or [www.cisco.com](http://www.cisco.com). Nortel can be reached at (800) 466-7836 or [www.nortelnetworks.com](http://www.nortelnetworks.com). Ericsson is at (972) 583-0000 or [www.ericsson.com](http://www.ericsson.com). ◀

## Ashland Fiber Network

◀ CONTINUED FROM PAGE 51

net cable to some 8,900 customers, it stepped back due to the high cost, Lovrovich said.

With the hybrid fiber/coaxial design, the total cost to build the network is about \$5 million, which the city plans to fund through a commercial loan.

Ethernet set-top boxes for cable television cost about \$700 to \$800 each, and the cost to terminate the fiber connection at the home would add another \$400 to \$600, according to Richard Holbo, telecommuni-

cations engineer for the Ashland Fiber Network. Such cost increases are hard for a city-owned facility to swallow. "[I didn't want to] get on TV with the city council and talk about why I want to add \$2 million to the cost of this project," Lovrovich said.

Ashland's three-tiered network includes the existing 172-strand fiber backbone, which is driven by two Packet Engines Inc. PowerRail 5200 Gigabit Ethernet switches with an aggregate switching capacity of 52G bps. A second-tier network with 48 strands of fiber will cover another 20 miles in redundant configurations out to neighborhood nodes, or neighborhood area networks. Those nodes will comprise a mix of Packet Engines' PowerRail 1000 routing switches and General Instruments Corp. equipment that converts analog coaxial signals into optical-fiber signals.

The PowerRail 1000s will be used for the high-speed connection service, and the General Instruments devices will be used for cable modem access. The General Instruments devices will connect to Cisco Systems Inc. Universal Broadband Routers at the network's head end, which will convert analog signals into digital data.

The Cisco routers will also connect in the head end into the Packet Engines PowerRail 5200s, interconnecting the high-speed Ethernet network with the hybrid fiber/coaxial backbone.

Brian MacLeod, Packet Engines' vice president of business development, in Spokane, Wash., said Ashland's network is just one of at least 80 similar projects in

the United States. Other communities building metropolitan area networks include Glasgow, Ky.; Cedar Falls, Iowa; Palo Alto, Calif.; and Braintree, Mass.

In Ashland, the network design goal is to avoid the congestion problems that have plagued other cable modem services. Rather than the typical 1,000 users per node design, each node will support a maximum of 300 homes or users. Lovrovich hopes to begin offering services based on the coaxial links next month, with the build-out taking just over a year if all goes as planned.

### Keeping the noise down

"We're transmitting analog signals with digital data encoded in it. If you have a high node count, every time a user sends a signal out, the amplifiers amplify everything—including the noise—which increases congestion," Holbo explained. The hybrid fiber/coaxial design minimizes that effect by keeping the node counts low and by reserving more frequencies for the return transmission, he said.

On the backbone itself, high-speed connectivity services using a basic Ethernet connection are being offered to local schools—particularly Southern Oregon University—as well as municipal offices; the public library; and a handful of businesses, including Project A Inc., a software developer. Rates range from \$651 per month for a 10M-bps link to \$1,364 per month for a 100M-bps link.

For Internet access, the plan is to make the network available as a basic transport

to ISPs, which could, in turn, offer a variety of Web services. The city early this year invited about 18 ISPs to examine the network. The enticement: a cheap, high-speed transport available for consumer accounts, Web hosting and whatever services they dream up that could take advantage of a high-speed DS-3 link from Qwest Communications International Inc. to the rest of the connected world. Ashland will charge ISPs \$15 a month per customer for the transport, with the ISPs free to set their own rates for services. Three ISPs have expressed interest, but none has yet signed on.

This type of high-speed Internet access could really open some doors, said local telecommuter Todd Steele, senior advisory analyst at Compaq Computer Corp. "High-speed access is pretty hard to come by; it really breaks down a lot of barriers—especially for commercial applications," Steele said.

Cable services are also scheduled for rollout this year. Those services will be owned by the city, which plans to offer a more flexible rate structure and package options. "The rate approved in the business plan is \$24 per month, and that's about 24 percent less [than the existing local provider]," Lovrovich said.

These services are just the start. Because the network is scalable, the range of new services that can be added is limited only by imagination and capital. With fast, cheap connectivity, city planners hope to increase the number of new jobs and business opportunities at a faster rate than a small community such as Ashland otherwise could. ◀

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# TelecommuniCombat

An Oregon city battles with the local cable provider to offer residents more reliable and less expensive service.



Ashland, Ore., officials encountered fierce opposition from the local cable T.V. provider.

It appeared to be prudent planning. The impending deregulation of electric utilities did not bode well for Ashland, Ore. The city has a long history of running its own utility at a profit, which has put smiles on generations of city officials and residents. Yet this cash cow was destined to fall into the cross hairs of power marketers who soon would have the right to cherry pick Ashland's largest and most coveted customers, leaving property taxpayers holding the bag.

After exploring various revenue-generating options, Ashland officials drafted a plan: Install a 172-count single-mode fiber optic ring in the heart of the city, then extend it into the residential areas through a radial spike series of 24 nodes. Coaxial cable would be run from the nodes to each house. The result would be a physical infrastructure that would allow the city and the citizens it serves a

flexible and fast connection to the world.

Through the leadership of Director of Electrical Utilities Pete Lovrovich, the utility won City Council approval to build the fiber optic loop while developing a business plan to bring digital resources to the city of 18,000. Ashland officials realized they had tangible assets to put the project in motion. The city already owned the necessary poles, conduits and rights-of-way and had a work force capable of pulling the fiber. "It seemed silly to spend all the time and money putting in the fiber and not get any revenues from the most lucrative digital product: entertainment video," said Lovrovich.

Ashland has one cable and one local telephone provider. The promise of the federal Telecommunications Act of 1996 has not materialized in southern Oregon. Residents have a choice between U.S. West or two tin cans and some kite string.

For cable television, the choice is TCI or dental fillings that can pick up some analog video feed.

Lovrovich visited cities and utilities that had already put cable, data and Internet systems in place and hoped to learn from others' experiences. Those visits stirred up a vision of an Ashland fiber network. He held initial meetings with Southern Oregon University, Ashland Community Hospital, the local school district, members of Ashland's fast growing high-technology firms and TCI, to explore the many possibilities that would open to the city once the fiber network was installed. Regional and federal grant requests were submitted. The vision of a fiber network was no secret, but the situation changed quickly and dramatically.

TCI and Falcon Cable launched a public relations campaign aimed at convincing the City Council that operating a high-ca-

capacity fiber optic system—with the capacity to provide high-speed Internet access, video conferencing, tele-medicine, distance learning, telephony and interactive entertainment video—was a poor idea.

“TCI/Falcon contends that it is to our taxpayers’ peril that we spend any money on a network that might offer competitive CATV,” said Lovrovich. “Their technology is old, their infrastructure needs to be updated at great cost.

“It is my opinion that they are concerned that if we deploy, hundreds of other municipal utilities across the nation will want to follow our lead,” he said.

The public relations firm hired by TCI and Falcon targeted board members of a regional group that dispenses lottery dollars. Ashland had made two grant requests to this group, both of which were report-

**“THEY ARE CONCERNED  
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edly well received. But the firm’s tactics apparently worked; Ashland’s grants were subsequently denied. A TCI employee was on the deciding board. Ashland was caught unaware by the lobbying effort, but vowed

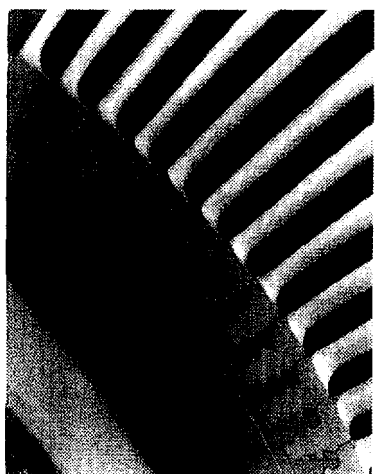
not to be blind-sided again.

“TCI/Falcon is working overtime trying to influence Ashland’s decision-makers that competition is not a good idea,” said Lovrovich. TCI has conducted its own survey on installing a fiber network, but would not share the results with Ashland officials, he added.

With the help of outside consultants, the city put together a preliminary business plan. Some basic assumptions were scoffed at by cable executives. They demanded, and received, draft copies of assumptions in progress—not wanting to wait until the city had a final plan in hand.

The Cable Telecommunications Association presented a white paper called “Municipal Ownership: An Ongoing Review of the Status of Municipal Ownership of Cable Television Systems ... or ... Look Before You Leap.” The 10-page

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- Bulk power marketing
- Project management
- Control systems upgrades/replacement
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- Water chemistry

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**Ashland's electric utility already had the necessary poles, conduits, rights of way and work force to construct its fiber optic loop.**

paper, handed to city councilors, slammed municipal initiatives with derogatory messages, such as:

- "Municipal Ownership: A Record of Failure,

- Look Before You Leap,

- Municipal Ownership Is Not Good Public Policy, and

- It's Bad Public Policy for Government to Compete With Private Providers of Cable Service."

Officials in Morganton, N.C.; Paragould, Ark.; Glasgow, Ky.; and Cedar Falls, Iowa, all took issue with claims made in the white paper.

The stakes in Ashland escalated once a few well-placed announcements in the *Medford Mail Tribune*, a newspaper in the largest city in Ashland's region, were discovered. Citizens were told that running a cable operation is an extremely risky business, requiring expensive resources and qualified expertise that only private enterprise could offer. Accordingly, TCI/Falcon Internet announced it would embark on a three- to five-year overbuild and upgrade, allowing high-speed Internet access to all cable-ready households in southern Oregon, including Ashland. Only a few weeks before, TCI management said there was

no money available to expand services to some remote areas in the valley, but now, with Ashland moving forward, suddenly money was not an issue.

The TCI/Falcon Internet connection promises to be "a hundred times faster than current modem connections." A hundred times faster than a 28.8 kbps connection is in the neighborhood of three mbps, or about one-tenth of Ashland's goal of a 30 mbps cable modem. Against the backdrop of rapid bandwidth expansion, calling it high speed is like saying a mountain cabin has running water, without mentioning that the water is running in a creek a quarter-mile away and you have to run with a bucket to get some.

There are many ways that TCI/Falcon and Ashland could work together, though that does not now seem likely to happen. According to Lovrovich, the private cable providers would be willing to lease fiber to the city in exchange for the city's pledge to stay out of the cable communications business.

"If nothing gives, our relationship might be one of competition," said Lovrovich.

It is a mistake to compare just cable to cable when the larger picture clearly shows how available future digital services

will be to residents. When packaged with entertainment video, these services will constitute a combination of offerings with only one bill to pay and one phone number to call if service is needed. Ashland residents are well aware of the city-owned electric utility's prompt service.

Falcon was to be a 52 percent partner with TCI in the regional monopoly, which did not bode well for a progressive community determined to complete a digital end run. Industry officials were brought in to speak at an Ashland Chamber of Commerce forum in June. Marc Nathansan, the founder and chairman of Falcon, was the industry's lead speaker and was flanked by TCI Vice President William Tierney. The public relations firm hired by TCI/Falcon retained former Oregon Gov. Neil Goldschmidt, a private industry champion, to speak at the forum. Ashland Mayor Cathy Shaw headed the city's team, which included Lovrovich, Ashland City Administrator Mike Freeman and Director of Information Services Dick Wanderscheid.

After opening remarks, the forum broke into discussion groups, each staffed by a moderator. Senior cable-company executives were deployed like a ranger squad into the study groups, calmly asking each moderator questions about the potential financial liability to the residents of Ashland. The intent clearly was to pull off a classic slick vs. hick tactic. But residents of the cultured Ashland community were not deceived.

With every passing week more TCI/Falcon-retained accountants and lawyers are eager to review every aspect of the proposed Ashland fiber network, claiming that they will save the city residents from themselves.

Unfortunately, this might be only the beginning of TCI/Falcon's attempt to foil the fiber network. Ashland, despite being a relatively wealthy community, is merely a financial ant compared to the combined wealth of TCI/Falcon. ■ Lance K. Pugh

*Lance K. Pugh is a member of the Strategic Steering Committee and the Technology Advisory Committee for Ashland's Fiber Network.*

# Schools and others in Stillwater, Okla., team up with the local electric utility to build a fiber optic network

Stillwater, Okla., found the historical precedent set by public power utilities at the opening of the 20th century useful in helping this city of 40,000 open doors to the new millennium.

The city, its public power utility, the school system, Oklahoma State University and some private businesses have joined forces to bring high bandwidth fiber optics communication capabilities to the area in the face of high prices and less than stellar cooperation from the local investor-owned telephone company.

"This all began five years ago, when a group of 'techies,' including me, got together and drew up a plan for a fiber optic system that could provide high-speed data communications, cable television, telephone, Internet access, meter reading and other services," Mike Herron, electric director for the Stillwater Utilities Authority, told *Public Power Weekly*. "So many individuals, companies and government entities wanted better telecommunications services, but our local telephone company has classified Stillwater as a Tier 3 city, meaning it's fairly low on the list of cities considered for upgrades to fiber optics. The local telephone company considers Stillwater too small, with too few potential users, to justify the expense involved in providing fiber optics here."

So these techies jointly planned a fiber optics system that they could build and operate independently, much as small-town residents established their own electric utilities when the investor-owned electric utilities proved uninterested in serving them. Unfortunately, Herron said, "the system we devised would have cost \$35 million to build. We presented the plan to the city but it was shelved due to the cost. But we did keep all our data and designs."

That information became very valuable a year later, when the Stillwater school board approved a plan to network all of the system's schools and facilities. At the same time, the

Stillwater electric utility was considering the installation of a fiber optic system for SCADA communications and remote networking. Soon, the area's major medical center, OSU and the local vocational-technical school came on board. The entities cooperated on developing a plan for a 'bare bones' system at a cost of \$491,000.

The city was ready to begin work on its project when, Herron said, "the local telephone company began to resist this idea." The company questioned the group's design, so the city's trustees had it reviewed by an outside consultant. The consultant found nothing wrong with the plan, but suggested some upgrades and changes that increased capabilities and raised the total cost to about \$680,000.

The telephone company's attempt to negotiate separate long-term contracts for telephone service with individual governmental entities resulted in all those government departments, the schools and other businesses joining forces in the Stillwater Fiber Optic Alliance, and informing the telephone company that the alliance members would only negotiate for services as a single entity. This



Stillwater Electric Utility crew members mount the fiber-packed cables on one of hundreds of poles throughout the city. The \$2.7 million fiber optic network is expected to be completed this fall. Photo by Micholann Ooten, Oklahoma Municipal League

strength in numbers approach also gave the alliance a stronger case when searching for a telecommunications company to partner with in building and running the fiber optic system.

"The city decided early on that we didn't have the capabilities to operate a telecommunications company," Herron said. "We needed a partner. We received proposals from several firms, including our local telephone company, and in the end, the city awarded the contract to Chickasaw Holding Co."

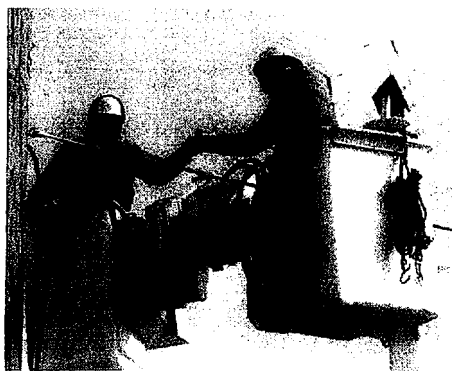
An Oklahoma-based telecommunications firm already certified to provide telephone service in the state, (continued on page 5)



## Stillwater builds high-speed communications system

(continued from page 4)

Chickasaw Telecom, as it is known, is a smaller, growing company willing to work with the alliance and the city to create a showcase fiber optics systems. Herron said, "This is a great win-win situation for Stillwater and Chickasaw.



Journeyman Walt Lynch, right, assists journeyman Bill Kennedy as teams work to string 56 miles of cable in Stillwater.

The utility has agreed to pay \$580,000, including up to \$125,000 in services, while the school system will provide about \$100,000 in cash and services to Chickasaw to construct the system. Once the system is up and running, Chickasaw agreed to return to the city 5% of its gross revenues for the first three years, and 7% of its gross revenues for the following seven years. Alliance members also will receive telephone services at rates at least 5% lower than our current telephone rates. And to top it all off, the prices of equipment and the technology have dropped, so the system Chickasaw is installing will be about 10 times faster than we had originally planned. We've estimated that the services that the public power utility will receive at no charge have a value of about \$882,000 over the 10-year contract period; the school system will receive services worth about \$650,000."

The attraction for Chickasaw, Herron says, lies in the potential for significant profits by providing services ranging from cable television to PCS telephones and Internet access to Stillwater's businesses and residents. And that potential is enormous,

Herron said. Oklahoma State University promotes itself as a high tech center. "That's helped to spawn a lot of businesses that are involved in the telecommunications and computer technology business, and of course, we also have students, faculty and others living here. Stillwater really needs this kind of service and our citizens will be eager to sign on."

Herron believes a public power utility can learn several important lessons from Stillwater's experience. "First, start by discussing your ideas with your local service providers—cable TV, telephone, etc. They may have plans to upgrade or change their systems that make it possible for you to work together. If you decide to go forward with your own plans, find a partner rather than awarding a franchise; this can really change the mindset of everyone involved. Don't be afraid to detail the services you want, or to ask for services free of charge. The alliance here in Stillwater will use a very small portion of the system's total

capacity, but if we had to pay fees for that usage, it would be very expensive.

"And don't forget that the utility system has value you can use in negotiating. The utility owns the poles and has the right-of-way that telecommunications companies need. And the public power utility has personnel who can probably run that overhead fiber more quickly and inexpensively than the partner can."

Herron said, "A successful partnership like ours depends on both partners capitalizing on their own strengths. We can run lines and provide right of way; Chickasaw knows how to run a telecommunications company. The public power utility has avoided the political problems of going directly into operating a telecommunications system, and Stillwater will have a true, 21st century network."

Herron presented a paper with a detailed discussion of his city's successful effort at the APPA national conference in Salt Lake City, Utah, in June. ■



Each cable contains anywhere from 24 to 276 single-mode fibers. Stillwater crews leave a coil of cable at a point where Chickasaw crews will create a future splice to another cable. Photos by Michelann Ooten,

Oklahoma Municipal League



# Defending Munis' Role in Cable TV

City of Alameda rebuts with list of consumer benefits.

**I**N ACCORDANCE WITH OUR PREVIOUS DISCUSSIONS, we understand that the City of Alameda, Calif. and our municipal utility, the Bureau of Electricity are to be featured in an article to be published in your September edition. The article is being prepared by Mr. Len Grzanka, a local freelance writer, and is to discuss municipal telecommunications ventures.

Based on recent staff discussions with Mr. Grzanka, we have some concern that Alameda's situation be represented accurately.

Approximately 2 years ago, the bureau began an effort to develop systems affording greater command and control over our electric facilities. This effort evaluated technologi-

cally advanced infrastructures, including the installation of fiber-optic cable. As your readership is well aware, today's fiber-optic systems have tremendous capacity and also hold great promise for a variety of telecommunications products.

Because of the multiplicity of possible uses for this infra-

structure, the bureau's governing Public Utilities Board authorized a study by Stanford Research Institute Consultants to enumerate and evaluate additional uses for the fiber-optic system in order to make the best use of these city-owned facilities. This initial study confirmed

that further development of applications would be in the best interests of our citizen-owners. Last July, the bureau published a Telecommunications Business Plan. Briefly, the plan recommends Alameda's entry into telecommunications ventures for three reasons:

- (1) To capitalize on the organizational synergies and similarities of our electric utility and telecommunications endeavors in order to provide best use of City assets and greatest efficiencies.
- (2) To fill a gap in the franchised Alameda telecommunications market with a locally owned, managed, and operated telecommunications entity.
- (3) To provide additional revenues to the City of Alameda's General Fund.

Extensive investigations have revealed that our prospective telecommunications ventures carry significant benefits with minimal risk. Areas of differentiation from the present franchised provider of cable television service include:

- (1) Improved picture quality and service reliability yielded by the best technology and a reduction in amplifier cascades.
- (2) Improved customer service, including a reduction in queues and wait times.
- (3) Reduced charges for basic, extended, and pay-per-view services.
- (4) Improved channel lineups catering to individual subscriber interests and needs.
- (5) Better interdiction technologies affording our customers complete control over their video equipment.
- (6) Future value-added services, such as Internet access and telephony.

The capital costs for this initial venture total \$8 million. It has been proposed that funds be borrowed from Bureau of Electricity reserves, with competitive market-based

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We invite critical review of our plans by you or any of your readership.

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interest rates paid on a monthly basis and the principal to be repaid in 10 years.

We believe that the above, greatly abbreviated discussion illustrates a considered, measured, and cautious approach toward any possible entries into new business ventures. Our goal is simply to provide the highest possible level of service at competitive rates.

Also of relevance, the Bureau of Electricity is the oldest municipal electric utility in California and among the oldest in the world. We have unmatched experience that will be brought to bear on our prospective telecommunications ventures. The bureau has a record of service reliability and a record of safety that are among the best in the nation.

During the last fiscal year, we transferred \$2.6 million to our city's General Fund while maintaining rates that are competitive with those used in surrounding communities. Our Public Utilities Board and the staff of the Bureau of Electricity are enthusiastic and confident of our continued success.

Parenthetically, it must be noted that Mr. Grzanka has spoken in opposition to these efforts during a meeting of the Alameda City Council in July. We are concerned that the posture he has assumed may call to question his objectivity and color his reportage of the subject.

We invite critical review of our plans by you or any of your readership.

*Matthew T. McCabe  
Communications Officer  
City of Alameda Bureau of Electricity*

**EDITOR'S NOTE:** This letter was received prior to publication of Len Grzanka's article, "Utility Diversification: Munis Find Cable TV a Costly Business," in the Sept. 15 issue of *Public Utilities Fortnightly* (p. 34).

## ENERGY

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## Little Newnan, Ga., shows telecom business can pay

Listen to Jeff Strane talk about the virtual world of Newnan, Ga., and you'll want to live there. Or, if you run your own municipal electric utility, you'll want to be like Jeff.

Newnan Utilities has been in the telecommunications business since December 1996. The 95-year-old electric utility serves 5,500 electric customers. For now, Newnan has little prospect of expanding its base of electric customers because a 1973 state law established firm geographic territories for Georgia's private, public and cooperative utilities. As Newnan's city boundaries expanded, the utility was permitted to serve the (money-losing) water and sewer customers, but not the more lucrative electric customers. It could, how-

ever, provide cable TV services and it won permission from the state Public Service Commission to become a competing provider to BellSouth of local telephone service.

In 1996, Newnan embarked on construction of a 750-mhz cable system featuring two-way 10-MB cable modem access, 30 music channels and 86 TV channels. The system provides Internet access at a speed 32 times as fast as a 28.8 modem. Internet access is provided on Newnan's hybrid co-ax fiber system. Strane described Newnan's telecom venture at APPA's Strategic Marketing and Economic Development Workshop in Charleston, S.C., last week.

The telecommunications system is part of Newnan's economic development strategy, based in strong measure on a desire to avoid becoming a bedroom community for Atlanta. Without its own business base, Newnan would face the need to build high quality schools on a residential tax base, Strane said. The telecommunications system links the community in the same way that a single office building would link all of its computers on a local area network. Schools, libraries, homes and businesses are all hooked together and form a virtual community. The capacity and speed of the network makes it possible for children to conduct research on the Internet, prepare a homework assignment and e-mail it to their classroom. Hospitals can run a CAT scan on a patient and e-mail it to a physician's home, allowing the doctor to diagnose

and treat a patient from home.

A new residential development now under construction outside of Newnan will have cable television and telephone service from Newnan Utilities. The development, SummerGrove, will spring into existence with its own virtual existence, SummerGrove.net, a community home page that will provide information on babysitters, tee times, restaurant menus, and other community news. Part of Newnan Utilities' strategy is to build relationships with those telephone, cable and Internet customers so that when retail electric competition begins in Georgia—which Strane expects will happen in about 2003—Newnan Utilities can offer electric service to its telecommunications customers.

Entering the cable TV business in Newnan meant building a duplicate system to compete with the existing supplier. Once Newnan launched its project, the local cable company dropped its rates by \$10, bringing an immediate benefit to local residents. But the cable company considers itself part of the entertainment business. "We're in the utility business," said Strane. "We provide 24-hour repair service, we don't care whether its for kilowatt-hours or megabytes or telephone service. The cable company does not think this way."

The telecommunications venture has been a financial success for Newnan. The utility paid off its debt service on the cable system within two years. ■

## Groton, Conn., says yes to community-owned telecom

The city of Groton, Conn., plans to begin offering high-speed data transmission, Internet and telephone service later this year, now that voters have approved the plan.

Residents voted last month by a 7-1 margin to authorize their municipal electric utility, Groton Utilities, to enter the telecommunications business. They approved \$6.9 million in funding for the construction of a 32-mile fiber

customers, said Director of Utilities he said.

Alexander B. Chisholm. "The construction of the fiber optic network and all its related products allows Groton Utilities to offer a high-tech solution to business problems facing our customers today," he said. This will make it easier for the utility to create strategic alliances with its large business customers,

The city-owned utility must find new ways to offer better service to its customers, Chisholm added. "The utility industry that everyone knew is dead," he said. "Groton Utilities can only survive by responding aggressively to the rapid rate of change in today's business world." ■

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### Residents voted 7-1

### to authorize Groton

### Utilities to go into

### telecommunications.

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optic network.

The initial users of the fiber optic network are expected to be the utility itself, other municipal departments, schools and business customers, the utility said. The second phase of the project is expected to bring local Internet service to the residential customer.

"We will be better prepared to retain our existing customer base with this value-added service," and the utility will be well-positioned to acquire new

## Massachusetts muni offers long-distance service

The community-owned and operated electric and cable TV utilities in Shrewsbury, Mass., are now offering long-distance telephone service to the town's residents. "The telecommunications industry is rapidly changing and Shrewsbury Light and Cable is now in a position to offer residents long-distance telephone service at competitive market prices," said General Manager Tom Josie. "Our customers have come to rely on a long tradition of quality service, reliability and competitive rates in both light and cable services. They now can rely on the same with our long-distance phone service."

Josie said offering long-distance service is a way to use the municipal utility's electric and cable resources for the benefit of the town.

"The profits from our new service will stay with the stockholders of

Shrewsbury Light and Cable, the town's residents," Josie said. "Buying long distance from your local, town-owned and operated utility benefits the town while buying from someone else puts the profits into the pockets of stockholders of large long-distance telephone companies."

Shrewsbury Telephone will offer residents long-distance telephone service in alliance with New England Municipal Telephone Associates, Inc., (NEMTA), a Framingham, Mass., company that is developing alliances with municipal utilities across New England.

Our agreement with Shrewsbury is "a business relationship that extends the town's abilities to serve its own needs as well as provide benefits unique to towns which own and operate their own light and cable companies," said NEMTA President Bob

Mancini. "Shrewsbury Telephone is all about 'keeping long-distance local.'"

Shrewsbury Telephone is offering long-distance service at a flat rate of 15 cents per minute or 10 cents per minute with a \$4.95 service fee. Both rates apply 24 hours a day, seven days a week. Also, users can earn an addition bill credit every quarter. ■

# PUBLIC POWER WEEKLY

## Chattanooga to compete for local telephone business

The Electric Power Board of Chattanooga plans to start offering local telephone service later this year, under a license approved by Tennessee regulators Feb. 2.

"We feel that we can offer a very competitive alternative for customers wanting a choice in telecommunications providers," said Harold DePriest, president and CEO of the municipal electric utility.

Banks and other businesses in Chattanooga had asked the municipal utility to provide them with fiber optic links capable of transmitting information at high speeds, said utility spokesman Richard Goins. The Electric Power Board plans to offer such high-

speed data links, as well as local telephone service in competition with BellSouth, he said.

The city will not offer cable television service, as a law passed by the Tennessee Legislature in 1997 prohibits it from doing so. The Tennessee Cable Telecommunications Association fought Chattanooga's application for a telecommunications license from the Tennessee Regulatory Authority, said Ron Fugatt, executive vice president of the Electric Power Board.

Chattanooga already has a 10-mile fiber optic loop, built over the last year and a half, that encircles the downtown area. A \$2 million switch-

ing system will be installed at the utility's distribution center this fall and the city will spend about \$3 million over the next three years to build an additional 100 miles of fiber optic cable, said Fugatt.

The Electric Power Board has approved a \$10 million loan from the electric division to the telecommunications operation to be used to launch the new service, said Fugatt. Tennessee law bars cities from using power funds to subsidize telecommunications, but a loan is allowed, he said.

The Electric Power Board serves about 154,000 customers in a nine-county area that includes part of northwestern Georgia. ■

# PUBLIC POWER WEEKLY

A news summary for members of the American Public Power Association

No. 12 March 27, 2000

## ***Public power city in Georgia offers free Internet access via cable TV***

The city of LaGrange, Ga., announced March 22 that it will provide free Internet access to all cable television households in the community of 27,000. The city—which also owns its own electric system—has formed a telecommunications division that will provide the Internet access, said City Manager Tom Hall. It will be done through a partnership between the city and Charter Communications, the local cable company.

Basic cable TV service costs \$10 a month and at least 80% of LaGrange's households currently have cable, Hall said. The city will add Internet capability free of charge so that cable subscribers also will be able to surf the

Web and use e-mail using their TV screen and a wireless keyboard, he said. The connection will be much faster than a modem connection and won't tie up the phone line, he said.

"We see Internet literacy and computer competency as essential," said Hall. "We want to make sure everyone

*(continued on page 5)*



**LaGrange, a city of 27,000 about 60 miles southwest of Atlanta, has no property taxes. Above is a view of Smith Hall at LaGrange College. Photo courtesy of city of LaGrange**

## **City of LaGrange, Ga., promises to bridge its 'digital divide' by providing free Web access**

*(continued from page 1)*

[in LaGrange] has the ability to access the Web, without going to the expense of computers and Internet service providers."

The city wants to bridge its "digital divide," said Jeff Lukken, the mayor of LaGrange. "For many people—from students to senior citizens—this will be their first exposure to the Web and e-mail," he said.

The city decided to partner with Charter Communications in 1998, af-

ter studying how it could get an advanced cable system in LaGrange, said Hall. The city financed and built a state-of-the-art, two-way hybrid fiber coax network, then leased part of the network to Charter, said Hall.

The city will pick up the cost of installing the Internet access in individual homes, said Hall. The first hookups are expected to take place in early June and the city expects to be able to connect everyone by the end of the summer, he said. ■

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## **Hillsdale Awards Communications Contract**

The Hillsdale Board of Public Utilities has selected Virchow, Krause and Company of Madison, Wisconsin—partnering with Cable Constructors, Inc., of Iron Mountain, Michigan—as the project consultant and system engineers for the BPU*connect* advanced communication utility.

BPU*connect* is the broadband communication system that will soon link every home and business in Hillsdale to state-of-the-art cable television, high-speed Internet and advanced telephone services. In a recent special election, 69% of Hillsdale voters supported the construction and financing of this modern communication infrastructure. In a February press release, the BPU said, “The network will bring local competition to the telecommunication market, and it will improve the quality of life and enhance the economic development of the Hillsdale community.”

Virchow, Krause and Company is an accounting and consulting firm with considerable experience serving public entities such as the Hillsdale Board of Public Utilities. To date, they have worked with over 150 municipalities and 250 public utilities. Cable Constructors, Inc., is one of the largest telecommunication engineering and construction firms in the country. They have designed and constructed large high-speed networks throughout the United States, South America and Europe.

Cable Constructors will be responsible for the site mapping, fiber-optic and coax plant design, and all detailed engineering needed to construct the network. Virchow, Krause and Company will thoroughly examine all financial aspects of the communication venture, and will serve as the project's principle consultants.

The Hillsdale BPU currently provides electricity, water, and wastewater services to approximately 5,700 customers. The broadband network will be its fourth major utility service.

## ***Memphis board okays creation of telecommunications division***

The Memphis Light, Gas and Water Division board of commissioners has approved a resolution to establish a telecommunications division at the Tennessee utility. Recent state legislation

allows municipal electric utilities to enter the telecommunications industry as long as the venture is a stand-alone effort and is not subsidized by other divisions, MLGW said.

"The increased focus on competition within the energy and telecommunications industries has created both challenges and opportunities, and we are taking advantage of the best of these opportunities for the good of our customers," said MLGW President and CEO Herman Morris Jr.

The utility has partnered with Kansas-based A&L Networks, LLC to build a fiber optic backbone, said Wade Stinson, MLGW vice president of construction. The Ten-

nessee Regulatory Authority must approve the proposal before construction begins. Stinson said the

**MLGW "needed to be proactive and more aggressive in looking for ways to enhance our value to the community."**

utility hopes to break ground on the project shortly after New Year's.

MLGW's telecommunications branch will lease bandwidth to retail cable TV, Internet and phone companies wishing to sell services to residents and businesses in Memphis and Shelby County, said Stinson. The utility has no immediate plans to provide retail telecommunications services, he said.

MLGW "needed to be proactive and more aggressive in looking for ways to enhance our value to the community and customers we serve," said Morris. "That, along with the prospect of deregulation, has certainly motivated us to seek out opportunities such as this," he said. ■